

replication, transfer, film deposition by a CVD process, film deposition by a PVD process, by film transfer, by sol gel process.

15. (Previously Presented) A process according to claim 14, wherein said thin layer is a layer transferred onto the support by one of the following methods: bonding and molecular adhesion.

16. (Previously Presented) A process according to claim 14, wherein said thin layer obtained on the support is annealed.

17. (Previously Presented) A process according to claim 11, wherein the areal sample includes a complex associating a biospecific surface with sample molecules carrying a fluorescent marker.

18. (Previously Presented) A process according to claim 11, wherein the liquid medium flooding the areal sample includes a gel or a gas.

19. (Currently Amended) A device amplifying fluorescence emitted by an areal sample by, the device comprising:

a support configured to transmit all or part of a fluorescence signal emitted in response to an excitation signal and configured to support the areal sample; and

~~a liquid medium flooding the areal sample;~~

a thin layer interposed between the support and the areal sample, the thin layer having a refractive index greater than a refractive index of the support and than a refractive index of ~~the liquid a medium~~ flooding the areal sample during a measurement of fluorescence, a thickness of the thin layer being chosen so that the excitation and fluorescence signals pass in almost normal incidence through the thin layer, whereby the thin layer transmits all or part of the fluorescence signal.

20. (Currently Amended) A biochip for reading by fluorescence, the biochip comprising: